Grass
ALP4014 (Experimental Designation)

1. Variety name: _____ Kind: Perennial Ryegrass
   Genus: *Lolium* Species: *perenne*
   Experimental designation (s): ALP4014
   Date submitted: 3 January 2023 Ploidy Level for Ryegrass: Tetraploid

2. ALP4014 was developed from various cycles of recurrent phenotypic and genetic selection. Each cycle was selected for persistence and yield potential. ALP4014 traces its parentage to the released cultivars Aubisque, Fetione, Impala and Rosalin. Breeder seed was first produced in 2019 in Albany, OR. This cultivar is not essentially derived.

3. The primary use will be for Forage. ALP4014 has been trialed in Oregon and Arkansas.

4. Growth &	Heading Date (Calendar Day)		Mature Plant Height (cm)		Spike Length (cm)	
Morphology	Albany, OR		Albany, OR		Albany, OR	
Traits	2021	2022	2021	2022	2021	2022
ALP4014	9-Jun	20-May	84.6	93.9	42.2	61.8
ALP4012	10-Jun	20-May	68.0	71.8	31.0	41.7
CRAVE	11-Jun	22-May	83.8	93.5	38.7	56.6
T3	11-Jun	20-May	68.1	74.7	39.0	43.1
TREK	10-Jun	20-May	65.8	73.8	37.7	43.1
Trial Mean	10-Jun	20-May	74.1	81.5	37.7	49.3
LSD (.05)	2	2	4.5	4.5	14.9	4.3
CV	2	4	4.9	4.4	31.4	7.0

Data collected from: Spaced single plants X Plants in rows/solid seeding _____

Variants to be expected and frequency: 1% of plants with earlier heading date

5. Primary Use?	Forage Yields Avg lbs/Acre (fresh)				(9 = Best) Spring Greenup		Summer Density	
Forage	Albany, OR		Middle Fork, AR		Middle Fork, AR		Middle Fork, AR	
	2021	2022	2021	2022	2021	2022	2021	2022
ALP4014	17,052.5	25,552.1	17,378.7	11,162.3	7.3	6.0	4.7	3.0
ALP4012	21,648.8	19,063.0	18,104.7	11,071.5	7.0	5.3	5.7	2.7
CRAVE	19,593.8	24,725.3	13,444.7	9,388.7	6.7	5.7	5.7	3.7
T3	24,424.9	17,052.5	16,312.3	8,802.8	6.3	5.0	4.0	2.3
TREK	22,521.6	17,858.5	15,223.3	7,260.0	6.7	5.3	4.3	2.7
Trial Mean	21,048.3	20,850.3	16,092.7	9,537.0	6.8	5.5	4.9	2.9
LSD (.05)	5,329.2	4,504.2	7,721.2	5,768.2	1.3	0.7	1.3	11.9
CV	16.7	14.2	31.6	39.8	12.6	8.8	17.4	0.5

6. Breeder seed of ALP4014 was first produced in 2019. Breeder seed is maintained by NexGen Plant Science Center. Albany Oregon. Breeder seed is maintained by seed and may be re-multiplied at the breeder's discretion. Foundation seed can only be produced from fields sown with authorized Breeder seed. Registered seed can be produced from fields sown with Breeder or Foundation seed. Certified seed can be produced from fields sown with Breeder, Foundation, or Registered seed. Seed production of Foundation and Registered class will be limited to three years. Seed production of Certified class will be limited to five years. Additional years of seed production may be approved by the breeder, or an individual designated by the Director of Research NexGen Plant Science Center.

7. Certified seed will be first offered for sale by 2024. PVP is not currently being sought.